

SCIENTIFIC NOTES

NOTES ON THE USE OF THE GENERIC NAMES

PAGURUS, *EUPAGURUS*, AND *DARDANUS*
(CRUSTACEA: ANOMURA)By BRYCE C. WALTON¹ AND BELLE A. STEVENS²

For a period of about one hundred years there has been a persistent lack of agreement as to the proper generic names of some of the common hermit crabs. This unfortunate situation arose from disagreement solely on nomenclatural grounds. About fifty years ago the controversy involved the acceptance or rejection of a designation of a type species by Latreille. In spite of a definite attempt at clarification on the part of the International Commission on Zoological Nomenclature, the confusion has persisted and the views of both groups of disputants have been perpetuated by various contemporary workers. Regardless of the reasons for the original controversy, it is the feeling of the writers that the lack of agreement at the present time is a result of the obscurity of the facts concerned rather than a dispute regarding these facts. It is, therefore, the purpose of this paper to present a survey of the problem in an attempt to bring about the application of the proper names to the genera concerned.

The family Paguridae, to which all of the typical marine hermit crabs belong, naturally falls into two groups, generally designated as sub-families. One has the third pair of maxillipeds approximated at the bases and the left cheliped usually the larger. For clarity, these will be referred to as the apposed-jawed or "syngnathous" group in this discussion. The other group has the maxillipeds separated at the bases by a broad sternum and the right cheliped is usually the larger. These will be called separate-jawed or "chorignathous". At the present time the name *Pagurus* is used for a chorignathous genus by one group of taxonomists and for a syngnathous genus by others. Likewise, the subfamilial name, Pagurinae, is applied to both groups by the differing workers. This situation is a consequence of an attempt to correct an erroneous assignment of names when *Pagurus* of Fabricius was first divided by Brandt (1851) into *Pagurus* and *Eupagurus*. Since the type of the genus, *Pagurus bernhardus* (Linnaeus), is chorignathous, *Pagurus* should have remained as the name of the group containing the type, and the new name applied to the syngnathous group. However, Brandt reversed this procedure and his arrangement was adopted by subsequent workers. The following step by step chronological outline of the salient nomenclatural changes is given to illustrate the sequence of events.

1798. Genus *Pagurus* erected by Fabricius to include both syngnathous and chorignathous forms, but no type was designated.
1810. *Cancer bernhardus* Linnaeus indicated by Latreille as the type species of the genus.
1851. Genus split into subgenera *Pagurus* and *Eupagurus* by Brandt, with the name *Pagurus* erroneously being assigned to the group (syngnathous) not containing the type species.

¹ University of Maryland, College Park, Maryland.

² University of Washington, Seattle, Washington.

1852. *Pagurus* of Fabricius independently divided by Dana, also with the name *Pagurus* being assigned to a syngnathous genus, and the type placed in his new genus *Bernhardus*.
1856. *Eupagurus* of Brandt raised to generic rank by Stimpson.
1875. *Dardanus* split off from *Pagurus* of Brandt by Paulson.
1880. Kossman pointed out that *Dardanus* is not generically distinct from *Pagurus* Brandt.
1896. Benedict called attention to the erroneous assignment of the name *Pagurus* to the syngnathous group, and transferred it to the chorignathous, which contains the type. However, he proposed no name for the syngnathous group to replace it, in effect leaving this genus without a name for a period of six years.
1902. Benedict proposed the name *Pagurias* for the syngnathous genus.
1902. Rathbun pointed out that Paulson's name *Dardanus* was valid and available for this genus and had priority over *Pagurias*.

At the time of the papers by Benedict on this subject, several European carcinologists, among whom Stebbing was a principal spokesman, maintained that Latreille's designation of a "type" in 1810 did not constitute the designation of the type species because he did not use the term "type" in the sense that it later became accepted in zoological nomenclature, but merely as an illustration, or readily recognized example of the Pagurids. If this contention were accepted, the assignment of the names by Brandt could not be considered as being in error, since there would have been no requirement for retaining *Pagurus* for the *bernhardus* group.

To resolve this question, Miss Rathbun submitted the case to the International Commission on Zoological Nomenclature for a decision on the validity of the designation of types by Latreille. Some time between 1908 and the first half of 1910 (the records of the Commission for this period are lost) the Commission adopted Opinion 11, which ruled that the indication of types by Latreille should be accepted as designation of type species. This Opinion was first published in July, 1910.

When one considers that this question was decided by a Commission which had only recently become a permanent body, in an era when there existed many codes of nomenclature which had never become generally accepted, it is understandable how this decision was in some instances overridden by the strong personal feelings of certain highly respected workers, and the name *Eupagurus* was not allowed to die.

No fundamental reason for a change in the status of the names concerned has appeared in literature since the decision was published in 1910. With universal acceptance of the International Rules of Zoological Nomenclature and the International Commission on Zoological Nomenclature goes the corollary of acceptance of Opinion 11. On this basis the writers maintain there is a clear cut case in favor of the use of the names *Pagurus* and *Dardanus* and for the suppression of the name *Eupagurus*. Use of the sub-familial names Pagurinae and Dardaninae will of course follow the proper generic applications. To state the matter simply, the *Pagurus* of authors using *Eupagurus* is now called *Dardanus* and *Eupagurus* is now called *Pagurus*.

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